

United States Court of Appeals
FOR THE EIGHTH CIRCUIT

No. 01-1058

Fred Lauzon,

Plaintiff-Appellant,

v.

Senco Products, Inc.,

Defendant-Appellee.

*
*
*
* Appeal from the United States
* District Court for the
* District of Minnesota.
*
*
*

Submitted: August 21, 2001

Filed: October 26, 2001

Before BYE, LAY, and JOHN R. GIBSON, Circuit Judges.

LAY, Circuit Judge.

In December 1997, Fred Lauzon, a carpenter, was injured while using Senco Products, Inc. (“Senco”) bottom-fire pneumatic nailer, model SN2 (“SN2”). Lauzon brought suit for negligence, breach of warranty, manufacturing defect, and design defect against Senco for injuries that arose out of the use of the SN2.

The design of the bottom-fire pneumatic nailer enables it to drive nails by two different means. First, it can drive a single nail when the trigger and the bottom contact point are depressed. Second, it can rapid-fire nails when the operator depresses and holds the trigger and bounces the bottom contact point off the surface

of the work. Senco markets the bottom-fire pneumatic nailer for the second manner of use, the rapid-fire mode.

Senco produces a second type of pneumatic nailer, a sequential-fire tool. It drives nails only one way, when the bottom contact element is depressed and the trigger is subsequently pulled. Unlike the bottom-fire pneumatic nailer, the trigger of the sequential-fire tool must be released and squeezed each time the user seeks to fire a nail.

Lauzon was using the SN2 to roof a garage. He was lying on the edge of the roof while securing a fourteen-foot 2 x 6 to the roof sheathing. His left hand was supporting the 2 x 6 under the overhang and his right hand was holding the SN2. A fellow workman, Steve Nelson, was standing on a ladder underneath supporting the 2 x 6 Lauzon was attempting to secure.

Lauzon testified that he properly drove a nail and as the SN2 recoiled, two more nails were driven, the second one entering his hand. Lauzon acknowledges his finger was on the trigger, it being constantly depressed as he was employing the bottom-fire pneumatic nailer in its rapid-fire mode. Yet, he contends the SN2 should not have fired successive nails because the bottom contact point was not depressed, since it was four to five inches above the roof sheathing. Lauzon testified it was not possible that the bottom contact point came into contact with the sheathing because it would have shot the nails into the wood and not his thumb. However, he was uncertain of all the details because “it happened so fast, it was—it was like, wow, what—what happened you know.”

In spite of his uncertainty, he states that the accident was not the result of a “double-fire.” A double-fire occurs when the tool cycles twice before the user is able to remove the bottom contact point from the surface of the work, thereby unintentionally driving a second nail instantaneously after the first. Lauzon testified,

although two nails were expelled, it was not a double-fire because the bottom contact point was not depressed.

His fellow worker, Nelson, submitted an affidavit, dated May 22, 2000, stating he does not believe the SN2 double-fired, although he “could not say with absolute certainty,” and alluded to the possibility that Lauzon may have been using the SN2 in a hazardous manner. In a second statement, dated June 16, 2000, Nelson modifies his statement slightly. In this statement he claims he does not “specifically remember one way or the other” whether the SN2 double-fired or misfired, although he does “clearly remember that the safety tip of the nail gun was contacting the edge of the wood.”

Lauzon retained H. Boulter Kelsey as a proposed expert witness. Kelsey is a licensed professional engineer in the State of Missouri by examination. He earned a Bachelor of Science and a Master’s Degree in Mechanical Engineering from Washington University in St. Louis, Missouri. From 1973 until 1980, Kelsey was Assistant Dean at Washington University. For the past twenty years he has worked as a forensic engineer. He has previously testified in approximately forty pneumatic nail gun cases. See, e.g., Drabik v. Stanley-Bostitch, Inc., 997 F.2d 496 (8th Cir. 1993); Bailey v. Innovative Mgmt. & Inv., Inc., 890 S.W.2d 648 (Miss. 1994).

Kelsey performed a number of tests and analyzed the circumstances surrounding the injury. As a result of this analysis, Kelsey rendered an opinion: “[g]iven the tests that were conducted, Mr. Lauzon’s recollection of the accident occurrence is in error.” He stated that “Mr. Lauzon’s testimony that he believed the gun was some 4 to 5 inches above the plywood surface when the accident occurred can only be an error on his part.” Kelsey proposed a different interpretation of the event.

It would appear that in the process of moving his body down the sloped roof surface, Lauzon unintentionally and unconsciously caused the nose trigger of the subject Senco nailer to contact the edge of the plywood roof sheathing. When this occurred, only a portion of the bottom fire or nose trigger engaged the edge of the plywood which allowed a nail to be fired into or just past the edge of the plywood. Since the nail that was fired was totally unintended and unconsciously driven by Mr. Lauzon's movements, he undoubtedly experienced a second firing of the nailer due to recoil This second nail was driven in the same fashion with the nose trigger of the gun contacting the very edge of the plywood sheathing in such a manner as to allow the nail to be expelled past the sheathing and 2 x 6 and enter his hand below. Given the circumstances [sic] described by Mr. Lauzon and the testing accomplished on the subject model SN2 Senco nailer, no other scenario of the accident can be reasonably deduced.

H. Boulter Kelsey, Expert Report, at 6. Kelsey's conclusion that Lauzon's injuries were the result of a double-fire precludes the finding of a manufacturing defect, leaving only the claim of a design defect.

Kelsey opines the design of the SN2, a bottom-fire nailer, is defective because of the propensity to double-fire, therefore, he concludes the SN2 was unreasonably dangerous, and Lauzon's injuries were the result of a double-fire. Further, Kelsey opines the sequential-fire nailer is commensurate in its use to the bottom-fire nailer but is much safer because its design ensures a double-fire cannot occur. As a result, Kelsey proffers the inherently dangerous designed bottom-fire tool should no longer be on the market.

In applying the rules of Daubert v. Merrell Dow Pharm., 509 U.S. 579 (1993), but without holding a pretrial Daubert hearing, the district court excluded Kelsey's expert testimony, finding insufficient evidence to sustain plaintiff's case, and granted summary judgment for the defendant. Daubert emphasizes that the district court is the "gatekeeper" for the admissibility of expert testimony which, of course, is true

when the district court passes upon the admissibility of any evidence. Our standard of review is one of abuse of discretion, and in exercising this review, this court must give great deference to the ruling of the trial court. Yet, as the Supreme Court reminds us, it is the hallmark of our review, absent abdicating our duty, to analyze the trial court's ruling in light of the principles of Daubert and the Federal Rules of Evidence.

I. Analysis

Lauzon contends the district court erred by excluding the testimony of the proposed expert witness, Kelsey. The abuse of discretion “standard applies as much to the trial court’s decisions about how to determine reliability as to its ultimate conclusion.” Kumho Tire Co., Ltd. v. Carmichael, 526 U.S. 137, 152 (1999). The proponent of the expert testimony must prove its admissibility by a preponderance of the evidence. Daubert, 509 U.S. at 592.

Federal Rule of Evidence 702 governs admissibility of expert testimony. See Fed. R. Evid. 702. “Rule 702 reflects an attempt to liberalize the rules governing the admission of expert testimony.” Weisgram v. Marley Co., 169 F.3d 514, 523 (8th Cir 1999) aff’d, 528 U.S. 440 (2000); see also Daubert, 509 U.S. at 588 (citing Beech Aircraft Corp. v. Rainey, 488 U.S. 153, 169 (1988)) (highlighting the “‘liberal thrust’ of the Federal Rules and their ‘general approach of relaxing the traditional barriers to ‘opinion’ testimony’”). The rule clearly “is one of admissibility rather than exclusion.” Arcoren v. United States, 929 F.2d 1235, 1239 (8th Cir. 1991).

The proposed expert testimony must meet three prerequisites in order to be admitted under Rule 702. 4 Jack B. Weinstein & Margaret A. Berger, Weinstein’s Federal Evidence § 702.02[3] (2001). First, evidence based on scientific, technical, or other specialized knowledge must be useful to the finder of fact in deciding the ultimate issue of fact. Id. This is the basic rule of relevancy. Second, the proposed

witness must be qualified to assist the finder of fact. Id. Third, “the proposed evidence must be reliable or trustworthy in an evidentiary sense, so that, if the finder of fact accepts it as true, it provides the assistance the finder of fact requires” Id.; see also Daubert, 509 U.S. at 591.

The basis for the third prerequisite lies in the recent amendment of Rule 702, which adds the following language to the former rule: “(1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.” Fed. R. Evid. 702.¹ The language of the amendment codifies Daubert and its progeny. Id. Comm. Note.

In Daubert, the U.S. Supreme Court emphasized the district court’s gatekeeper role when screening expert testimony for relevance and reliability. Daubert, 509 U.S. at 591-93; see also Blue Dane Simmental Corp. v. Am. Simmental Ass’n, 178 F.3d 1035, 1040 (8th Cir. 1999) (during the evaluation “of expert testimony under Federal Rule of Evidence 702, the district court must look to both the relevancy and the reliability of the testimony”). Daubert provides a number of nonexclusive factors a court can apply in performing this role: “(1) whether the theory or technique ‘can be (and has been) tested’; (2) ‘whether the theory or technique has been subjected to peer

¹The complete, amended Fed. R. Evid. 702 provides:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

review and publication’; (3) ‘the known or potential rate of error’; and (4) whether the theory has been generally accepted.” Peitzmeier v. Hennessy Indus., Inc., 97 F.3d 293, 297 (8th Cir. 1996) (citing Daubert, 509 U.S. at 593-94). Daubert’s progeny provides additional factors such as: whether the expertise was developed for litigation or naturally flowed from the expert’s research; whether the proposed expert ruled out other alternative explanations; and whether the proposed expert sufficiently connected the proposed testimony with the facts of the case. Bogosian v. Mercedes-Benz of N. Am., Inc., 104 F.3d 472, 479 (1st Cir. 1997) (finding testimony of the expert and the plaintiff must be sufficiently related); Daubert v. Merrell Dow Pharm., Inc., 43 F.3d 1311, 1317 (9th Cir. 1995) (addressing whether opinion was developed naturally out of research or solely for litigation); Claar v. Burlington N. R. Co., 29 F.3d 499 (9th Cir. 1994) (discussing whether the expert accounts for obvious alternative explanations).²

²The Eighth Circuit has been consistently loyal to the language of Daubert and Federal Rule of Evidence 702. Of course, the facts in each situation are *sui generis* in that each panel opinion differs upon the varying evidential proofs. However, our examination of the cases in the Eighth Circuit show a consistent application of Daubert and Rule 702. We set out a collation of the various cases.

The cases that admit expert testimony are as follows: Clark v. Heidrick, 150 F.3d 912, 915 (8th Cir. 1998) (finding expert testimony offered by defendant as to possible causes of baby’s brachial plexus injuries admissible but excluded plaintiff’s medical expert’s testimony that flexion during delivery was the most likely explanation for the baby’s injuries on grounds outside of Daubert; it was offered for the first time in rebuttal and not the case in chief); Jensen v. Eveleth Taconite Co., 130 F.3d 1287, 1299 (8th Cir. 1997) (admitting testimony of well-qualified psychiatrists and psychologists on issue of damages for mental anguish and emphasizing that weight and credibility accorded to the testimony is left to the trier of fact); United States v. Davis, 103 F.3d 660, 674 (8th Cir. 1996) (finding expert testimony on ballistics was admissible based upon Daubert factors after a preliminary evidentiary hearing was held); United States v. Beasley, 102 F.3d 1440, 1447 (8th Cir. 1996) (allowing PCR method of DNA testing to be admitted due to its reliability, as demonstrated by applying the Daubert factors); Hose v Chicago Northwestern

Transp. Co., 70 F.3d 968, 973-76 (8th Cir. 1995) (allowing physician to testify as to position emission tomography scan of employee's brain, polysomnogram, and that employee's manganese encephalopathy was caused by inhalation of manganese fumes at employer's plant after analyzing the testimony in light of Daubert); United States v. Johnson, 28 F.3d 1487, 1497 (8th Cir. 1994) (allowing a coconspirator and gang member to testify as an expert regarding drug trafficking, which was found helpful to the jury, due to his extensive experience in the business of drug trafficking, evidenced by his six years establishing various drug distribution centers in assorted cities).

The cases that limit the proposed expert testimony are as follows: Wheeling Pittsburgh Steel Corp. v. Beelman River Terminals, Inc., 254 F.3d 706, 715 (8th Cir. 2001) (limiting testimony of an expert hydrologist to flood risk, thereby, finding testimony as to safe warehousing practices inadmissible); Weisgram v. Marley Co., 169 F.3d 514, 519 (8th Cir. 1999) (allowing a fire investigator to testify as to the origins of the fire but not as to the cause of the fire since there was no evidence in record to substantiate it); Robertson v. Norton Co., 148 F.3d 905, 907 (8th Cir. 1998) (admitting testimony of expert as to manufacturing defect, but not as to the defect of the warning label).

The proposed expert testimony was excluded in the following cases: Glastetter v. Novartis Phar. Corp., 252 F.3d 986, 992 (8th Cir. 2001) (excluding proposed expert testimony that Parlodel can cause intracerebral hemorrhages because proposed expert could not demonstrate causation to a degree of medical certainty as required by Daubert); Children's Broad. Corp. v. Walt Disney Co., 245 F.3d 1008, 1018 (8th Cir. 2001) (excluding the testimony presented by a proposed expert, that any breach of contract, any use of confidential information, or any misappropriation of any trade secret caused the exact same amount of damages, because he failed to consider the effect of competition, theory on causation was questionable and his testimony was based on a report produced prior to narrowing the claims for trial); J.B. Hunt Transp., Inc., v. General Motors Corp., 243 F.3d 441, 444 (8th Cir. 2001) (preventing a reconstruction expert from testifying because he had insufficient evidence to completely reconstruct the accident as he theorized and expertise of a "foam expert" not allowed where testimony is highly doubtful and linked to rejected testimony of reconstruction expert); Giles v. Miners, Inc., 242 F.3d 810, 812-13 (8th Cir. 2001) (precluding proposed expert from testifying based upon proposed expert's failure to

indicate how proposed safety guard would interact with freezer's proper functioning and it appeared the safety guard violated government and industry design standards requiring sanitary, easily cleanable surface); Turner v. Iowa Fire Equip., 229 F.3d 1202, 1208 (8th Cir. 2000) (preventing a proposed expert from testifying because differential diagnosis sought to identify the condition and not the cause); Blue Dane Simmental Corp. v. Am. Simmental Ass'n, 178 F.3d 1035, 1041 (8th Cir. 1999) (precluding the proposed expert economist from testifying because "no other economists use before-and-after modeling to support conclusions of causes of market fluctuation"); Jaurequi v. Carter Mfg. Co., Inc., 173 F.3d 1076, 1084 (8th Cir. 1999) (excluding proposed expert testimony on alternative design because of failure to provide basis for belief that opinion was anything more than unabashed speculation); Penney v. Praxair, Inc., 116 F.3d 330, 333-34 (8th Cir. 1997) (holding proposed expert testimony based upon comparison of positron emission tomography scan of brain of plaintiff and control group, which demonstrated traumatic brain injury, was found inadmissible because control group could not provide accurate comparison due to differences in age and plaintiff's use of medication); Wright v. Williamette Inds., Inc., 91 F.3d 1105, 1108 (8th Cir. 1996) (holding opinion of proposed expert, that complaints of residents near manufacturing plant were more probably than not related to their exposure to formaldehyde from plant, was not based on any knowledge about what amounts of wood fibers impregnated with formaldehyde involve appreciable risk of harm to human beings who breathe them, and so district court should have excluded expert's testimony); Peitzmeier v. Hennessey Indus., Inc., 97 F.3d 293, 297-98 (8th Cir. 1996) (excluding testimony of proposed expert because no testing ever took place, no peer review and no testimony regarding general acceptance was offered); Pestel v. Vermeer Mfg. Co., 64 F.3d 382, 384 (8th Cir. 1995) (finding that district court properly found that proposed expert was precluded from testifying about alternative design in products liability suit because of lack of testing, failed to contact others in industry to see if they had attempted to create a similar guard, not subjected concept to any outside scrutiny and not generally accepted); Sorensen v. Shakless Corp., 31 F.3d 638, 648-51 (8th Cir. 1994) (precluding proposed expert testimony because it was not relevant due to lack of reliable inference that Shaklee alfalfa tablets taken by parents contained any EtO, a toxin that can cause birth defects, as well as a failure to satisfy any of the Daubert factors); Nat'l Bank of Commerce of El Dorado v. Assoc. Milk Producers, Inc., 22 F. Supp. 2d 942, 963 (E.D. Ark. 1998), aff'd 191 F.3d 858 (8th Cir. 1999) (finding the proposed expert had not ruled out possible alternative causes and has failed to rule in the alleged toxin as a contributing

A. Testing

The first relevant factor is whether the expert's theory can be (and has been) tested. Daubert, 509 U.S. at 593. The district court found Kelsey's testing was inadequate because he was unable to duplicate the events of the accident. As a result, the district court found the testing factor weighed against the admission of Kelsey's testimony.

Kelsey's initial testing focused on two possible causes of Lauzon's injury: manufacturing or design defect. Pictures were taken of the SN2 involved in the accident. The trigger force was measured as well as the force needed to activate the bottom contact point. Nail speed was measured from varied distances. A pendulum test was then attempted in order to measure recoil forces of the SN2.³ The section of the roof was reproduced and the tasks Lauzon was performing were reenacted and recorded on video tape.

During the course of the examination, Kelsey determined this particular SN2 required depression of both the trigger and the bottom contact point to drive nails under any circumstance. Thus, Kelsey's testing provided additional trustworthiness to his opinion, contributed by objectively excluding one of Lauzon's claims, that the SN2 had a manufacturing defect.

cause of the cancer).

The evidentiary foundation determined to be lacking in the Eighth Circuit cases where the experts' testimony has been excluded, as we have attempted to analytically explain, is not missing in the foundational proof in the present case.

³The sticky operation of the contact point precluded commission of the pendulum test and its findings on recoil forces.

Due to previous experience with bottom-fire pneumatic nailers, Kelsey was aware they had a tendency to double-fire. He noted such in his report when he stated:

this tool like [other bottom-fire pneumatic nailers] is subject to recoil fire as a result of unexpected recoil forces operating back against the operator's grip. Under these circumstances, multiple nail firing does occur with some frequency, particularly when the recoil force is not correctly anticipated by the user as in the circumstance of the nail hitting harder or more dense area in the wood.

H. Boulter Kelsey, Expert Report, at 6. Kelsey's opinion was also supported by Lauzon's employer, Tony Hayes. He testified that this particular SN2 had a history of double-fires: "I don't know what you would call it, but if you—if you pushed it against the wood and pulled the trigger, it would bounce back on you and shoot a second nail."

The information obtained from the tests performed and the factual record were analyzed by Kelsey in the light of the teachings of mechanical engineering. The foregoing analysis ruled out a manufacturing defect. Instead of a manufacturing defect, Kelsey's testing led to the conclusion of a double-fire, a design defect. Kelsey testified that designing the SN2 as a sequential-fire pneumatic nailer would have prevented the accident from occurring because two nails could not be fired without actuating both the trigger and bottom contact point. Thus, the second nail, according to the testimony of Lauzon, would not have become impaled in his hand.

Kelsey has also testified as an expert in numerous other cases involving injuries resulting from the use of pneumatic air guns. Instead of detracting from reliability, this fact, coupled with Kelsey's testing and subsequent analysis in the present case, provides more than sufficient evidence to find that this factor weighs heavily in favor of admitting the testimony of Kelsey as an expert witness.

B. Peer Review and Publication

Another applicable factor is whether the theory or technique has been subjected to peer review and publication. Daubert, 509 U.S. at 593. “The fact of publication (or lack thereof) in a peer reviewed journal thus will be a relevant, though not dispositive, consideration” Id. at 594. Rather, the focus remains on reliability.⁴ Kannankeril v. Terminix Inter., Inc., 128 F.3d 802, 809 (3rd Cir. 1997) (citing Daubert, 509 U.S. at 593).

The district court held the peer-reviewed literature involved in this case did not rise to the level contemplated by Daubert. Therefore, the district court found this factor weighed against admitting the proffered testimony.

Kelsey authored an article, which was made an exhibit to his report, about pneumatic nailers that appeared in the Journal of the National Academy of Forensic Engineers. H. Boulter Kelsey, Jr., Forensic Engineering Aspects of Nail Gun Litigation, 25 Journal of the National Academy of Forensic Engineers 1 (1998) [hereinafter H. Boulter Kelsey]. As exemplified by its title, it is an organization, with approximately 450 members, whose work is primarily devoted to the investigation of engineering matters pertaining to legal cases. The article was published prior to the present litigation and comes to the identical conclusion as proffered in this case: bottom-fire pneumatic nailers are unreasonably dangerous. Id. at 10. In the article, Kelsey also concludes that the sequential-fire pneumatic nailer is the most effective means of negating the hazards associated with the inadvertent firing of the pneumatic nailer. Id.

⁴“Publication (which is but one element of peer review) is not a *sine qua non* of admissibility; it does not necessarily correlate with reliability” Daubert, 509 U.S. at 593.

In addition to Kelsey's article, two other publications, which were also provided as exhibits to his report, discuss pneumatic nail gun injuries. The two publications are a technical report conducted by the State of Washington and an article in Fine Homebuilding magazine.

The Washington report, performed by the State Department of Labor and Industries, examined the nature of pneumatic nail gun hazards in hopes of uncovering "methods to control and eliminate those hazards." Washington State Dept. of Labor and Industries, Pneumatic Nailer ("Nail Gun") Injuries in Washington State, 1990-1998, Tech. Rep. No. 59-1 (1999) [hereinafter Washington State Dept.]. After surveying injuries sustained from pneumatic nail gun use in Washington State, the Department made recommendations. The first recommendation is to "[u]se the sequential trigger until a safe record of use and experience with the tool has been developed." Id. at 2. The second recommendation is for manufacturers to work with users in order to "better balance the speed and productivity of the [bottom-fire pneumatic nailer] with the accuracy and potential for fewer acute trauma injuries using the 'sequential' mode." Id.

The Fine Homebuilding article surveys a construction crew's use of bottom-fire and sequential-fire pneumatic nailers of various models. Rick Arnold and Mike Guertin, Survey of Framing Nailers, Fine Homebuilding, Nov. 1996 [hereinafter Fine Homebuilding]. The survey directly compares bottom-fire pneumatic nailers and sequential-fire nailers in the setting they are commonly employed. The survey found bottom-fire pneumatic nailers "present the most danger of accident." Id. at 78. Further, it addressed and refuted the contention that bottom-fire pneumatic nailers allow for greater productivity in comparison to sequential-fire nailers: "we found we could keep close pace with a [bottom-fire pneumatic nailer] bounce-nailing" Id. at 79. In light of its minimal impact upon productivity and the hazards associated with the bottom-fire pneumatic nailer, the article recommends the sequential-fire nailer. Id.

Clearly, all these articles, which were exhibits to Kelsey's expert report, offer support for Kelsey's conclusion: the bottom-fire pneumatic nailer is unreasonably dangerous and a commensurate, safer alternative design, the sequential-fire pneumatic nailer, exists.

Further support for Kelsey's testimony under the peer review factor is found in the very language of Daubert; some propositions are too new to be published. Daubert, 509 U.S. at 593. The pneumatic fire nailers "increased popularity in the 1990's appears to have triggered an increase in injuries due to their use." Washington State Dept., at 1. The recent increase in nail gun use and injuries stemming therefrom accounts for, in part, the lack of wealth of peer reviewed information the district court sought.

The article published by Kelsey supporting the very essence of his testimony as well as recognition of the dangers associated with a bottom-fire pneumatic nailer and the safer alternative of a sequential-fire nailer in two additional publications is sufficient to meet the peer review factor under Daubert, especially when coupled with the only recent onset of pneumatic nail gun injuries. Therefore, the peer review factor weighs in favor of admitting Kelsey's proffered expert opinion.

C. General Acceptance

The next applicable factor is general acceptance.⁵ "Widespread acceptance can be an important factor in ruling particular evidence admissible, and 'a known technique which has been able to attract only minimal support within the community' may properly be viewed with skepticism." Daubert, 509 U.S. at 594 (citation omitted). Although general acceptance may still be a factor, it must be weighed with

⁵The parties agree that the third Daubert factor, rate of error, is not applicable to the facts of this case.

the Supreme Court's admonition that "a rigid 'general acceptance' requirement would be at odds with the 'liberal thrust' of the Federal Rules and their 'general approach of relaxing the traditional barriers to 'opinion' testimony.'" Id. at 588-89 (quoting Beech Aircraft Corp., 488 U.S. at 169 (citing Rules 701 to 705)). See also Weinstein, Rule 702 of the Federal Rules of Evidence is Sound; It Should Not Be Amended, 138 F.R.D. 631 (1991) ("The Rules were designed to depend primarily upon lawyer-adversaries and sensible triers of fact to evaluate conflicts.").

The district court found that there has been no demonstration that Mr. Kelsey's theories are accepted, let alone generally accepted by the relevant scientific community. Thus, the district court found this factor weighed in favor of precluding Kelsey from testifying as an expert.

The general acceptance factor dovetails with the prior factor, peer review. Bottom-fire pneumatic nailers are known for problems associated with double-fires throughout the industry as illustrated by the aforementioned articles. See Washington State Dept.; H. Boulter Kelsey; Fine Homebuilding. In addition, those who utilized this particular SN2 were cognizant of its tendency to double-fire. Tony Hayes, Lauzon's employer, testified that the particular SN2 employed by Lauzon had a tendency to double-fire. Also, Tony Hayes testified, even if the user was aware of the problem, it could not be consistently avoided. Clearly, it is generally accepted that bottom-fire pneumatic nailers have the tendency to double-fire. Further, this tendency to double-fire can cause the user or a co-worker in the vicinity to be injured due to the release of an unintended nail. See, e.g., Washington State Dept., at 1.

The next issue under the rubric of general acceptance is whether there exists general acceptance of the reasonable alternative design, the sequential-fire pneumatic nailers, as proposed by Kelsey. The report prepared by the State of Washington recognizes the hazardous propensities of the bottom-fire pneumatic nailers and recommends use of sequential-fire pneumatic nailers in their stead. Id. at 1-2; see

also Fine Homebuilding, at 79 (recommending the use of sequential-fire pneumatic nailers). Further, the use of a sequential-fire pneumatic nailer does not diminish the efficiency of the tool in comparison to the bottom-fire pneumatic nailer as discovered in the survey that appears in Fine Homebuilding. Id. (rejecting the common perception that a sequential trip mechanism is slower).

Kelsey's opinion comports with those generally accepted in the industry in recognizing the hazards associated with the bottom-fire pneumatic nailer's propensity to double-fire as well as a reasonable alternative, the sequential-fire pneumatic nailer. We conclude the factor of general acceptance weighs substantially in favor of accepting the proffered testimony of Kelsey.

D. Opinion's Basis

The next factor stems from the direct progeny of the Supreme Court's decision in Daubert. On remand, the U.S. Court of Appeals for the Ninth Circuit discussed the importance from where the proffered expert opinion emanates.⁶ Daubert, 43 F.3d at 1317. "That an expert testifies based on research he has conducted independent of litigation provides important, objective proof that the research comports with the dictates of good science." Id. (citing Peter W. Huber, Galileo's Revenge: Junk Science in the Courtroom, 206-09 (1991)). An expert's finding that flows from research independent of litigation is less likely to be biased and the expert is limited to "the degree to which he can tailor his testimony to serve a party's interests." Id.

Kelsey's introduction into the field of pneumatic fire nailers was through past litigation. The article he authored arose from this involvement, although additional testing was performed outside of the litigation. See id. Yet, Kelsey's opinion in this

⁶The district court discussed the factor indirectly under peer review and publication.

case does not solely originate from this past research, rather, emanates from his own independent testing. As previously stated under the testing factor, Kelsey performed the following tests: took pictures of the SN2 in question; measured trigger forces; measured force to activate the bottom contact point; measured nail speed; attempted a pendulum test; and recreated and recorded the incident. Thus, Kelsey's testimony stems not only from his involvement in past litigation, but also from the testing performed on the particular SN2 employed by Lauzon.

Further, the independence of his testimony is demonstrated by its seeming contradiction with that of Lauzon. Id. Kelsey opines that the bottom contact point touched the sheathing and a double-fire occurred, but Lauzon contends the bottom contact point did not hit the sheathing so a double-fire did not occur. This contradiction foments the conclusion that Kelsey's testimony flows naturally out of his own research by illustrating that the plaintiff does not control his testimony. See id. If the plaintiff dictated Kelsey's testimony, surely his opinion as to how the injury occurred would not conflict with the plaintiff's own testimony.

Further support for this factor is found by adhering to its underling rationale, scientific reliability. Id. (citing Peter W. Huber, Galileo's Revenge: Junk Science in the Courtroom, 206-09 (1991)). Scientific reliability can also be shown "by proof that the research and analysis supporting the proffered conclusions have been subjected to normal scientific scrutiny through peer review and publication." Daubert, 43 F.3d at 1318. As demonstrated earlier, the peer review and general acceptance factors favor admission of Kelsey's expert opinion.

In conclusion, the slight negative impact of Kelsey's introduction to the field of pneumatic nail guns through litigation is outweighed by his independent research, independent testimony, and adherence to the underlying rationale of the general acceptance factor, scientific reliability.

E. Exclusion of Possible Causes

Another factor commonly applied to the determination of admissibility of an expert opinion is the ability to rule out other possibilities.⁷ Claar, 29 F.3d at 453 (discussing whether the expert accounts for obvious alternative explanations); cf Ambrosini v. Labarraque, 101 F.3d 129 (D.C. Cir. 1996) (stating that the existence of causes not eliminated pertains to weight and not admissibility). Yet, this requirement cannot be carried to a quixotic extreme. Exemplifying this limitation, the U.S. Court of Appeals for the Third Circuit concluded that an “‘expert’s causation conclusion should not be excluded because he or she has failed to rule out every possible alternative cause.’” Westberry v. Gislaved Gummi AB, 178 F.3d 257, 265 (4th Cir. 1999) (quoting Heller v. Shaw Indus., Inc., 167 F.3d 146, 156 (3rd Cir. 1999)) (emphasis added).

⁷Courts often cite this factor when addressing an expert opinion on causation arrived through a differential diagnosis. See, e.g., Turner, 229 F.3d at 1207 (discussing whether the doctor’s differential diagnosis was aimed at cause or solely symptoms); Glastetter v. Novartis Pharm. Corp., 252 F.3d 986, 989 (8th Cir. 2001) (detailing doctors’ differential diagnosis in attempting to connect Parlodel and intracerebral brain hemorrhage); Westberry v. Gislaved Gummi AB, 178 F.3d 257, 262-66 (4th Cir. 1999) (detailing that a doctor’s differential diagnosis is generally accepted and also discussing the requirement to rule out possible alternatives as well as rule in the alleged cause); Nat’l Bank of Commerce of El Dorado v. Associated Milk Producers, Inc., 22 F. Supp. 2d 942, 963 (E.D. Ark. 1998) (stating that even when a doctor rules out alternatives, the plaintiff still bears the burden of ruling the claim in). As illustrated, doctors commonly utilize the method. A differential diagnosis is performed by “‘ruling in’ all scientifically plausible causes of the plaintiff’s injury. The physician then ‘rules out’ the least plausible causes of injury until the most likely cause remains.” Glastetter, 252 F.3d at 989 (8th Cir. 2001). The remaining cause is the expert’s conclusion as to what caused or did not cause the plaintiff’s injury. Id.

The district court did not separately discuss this factor, rather, addressed it under testing, the first factor. The court found Kelsey was unable to rule out other accident theories, except for ruling out a manufacturing defect.

Kelsey's testing demonstrated the SN2 in question would not fire with only the trigger mechanism being depressed, rather, both the bottom contact point and trigger had to be activated. This ruled out a manufacturing defect. Kelsey has ruled out all other possible explanations through a safer alternative design, the sequential-fire pneumatic nailer. Kelsey opined that a properly designed tool, a sequential-fire tool, would prevent an injury under any theory in this case. It is undisputed that Lauzon continually depressed the trigger as he was securing the roof sheathing. Utilizing a sequential fire tool would have required the bottom contact point to be depressed against the roof sheathing and then the trigger to be pulled each time he sought to fire a nail. Thus, Kelsey's proffered opinion rules out all possible causes because the use of the sequential-fire tool would preclude a nail being expelled at all, let alone into the hand of Lauzon.

Even a specious interpretation of Kelsey's testimony, which would enable other possible theories of the event to exist such as an accident, does not preclude his testimony under this factor. In Westberry, the court found the doctor only "explained why he did not believe that the cold Westberry developed in 1994 or the waterskiing he did over that summer accounted for his sinus problems." Id. at 266. The doctor's explanations as to conclusions not ruled out went to weight and not admissibility. Id. 265-66. After discounting obvious alternatives through scientific testing, such as the manufacturing defect, Kelsey need only be able to explain why other conceivable causes are excludable. Senco may attack Kelsey's explanations of causation on cross examination, thereby requiring Kelsey to offer valid explanations as to why his conclusion remains reliable. See McCulloch v. H.B. Fuller Co., 61 F.3d at 1038, 1044 (2d Cir. 1995). To hold otherwise denigrates Justice Blackmun's observation in Daubert:

[I]n this regard respondent seems to us to be overly pessimistic about the capabilities of the jury and of the adversary system generally. Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence. See Rock v. Arkansas, 483 U.S. 44, 61 (1987).

Daubert, 509 U.S. at 596.

The ruling out of the manufacturing defect simultaneously rules in a design defect. Further, an accurate interpretation of Kelsey's testimony illustrates that he opines a sequential-fire tool precludes all other theories, including accidental. Even a specious interpretation allows for the testimony to be admitted because of his exclusion of other claims and due to the protections afforded by the very nature of our legal system. In conclusion, sufficient evidence exists to meet this factor.

F. Relevancy

The last applicable factor that bears upon the admission of expert testimony under Rule 702 is whether the opinion offered by the expert is sufficiently related to the facts of the case such that it will aid the jury in resolving the factual dispute. Id. at 591; see also Bogosian, 104 F.3d at 479 (finding that testimony of expert and that of plaintiff must be sufficiently related).

The district court appeared more concerned with this factor than any other. The trial court held the theory offered by Kelsey does not sufficiently relate to Lauzon's recollection of events. Thus, the trial court found that Kelsey's opinion was not relevant and weighed against admitting his testimony.

Differences do exist between Lauzon's and Kelsey's versions of the event. Lauzon testified that he properly drove a nail and, as the SN2 recoiled, two more nails

were driven. He believes a double-fire did not take place because he thought the bottom contact point was four to five inches above the sheathing, therefore, the firing mechanism could not have been actuated.

Kelsey discredits, in part, Lauzon's theory of the event based upon his research and scientific testing. Kelsey tested the SN2 for a manufacturing defect, one that would enable the SN2 to drive nails when the trigger was pulled, even though the bottom contact point was not depressed. Through testing, Kelsey was unable to find such a defect in the particular SN2. As a result of the tests conducted, Kelsey concluded, "Lauzon's recollection of the accident occurrence is in error [I]n the process of moving his body down the sloped roof surface, Lauzon unintentionally and unconsciously caused the nose trigger of the [SN2] to contact the edge" sheathing, causing a double-fire. H. Boulter Kelsey, Expert Report, at 6.

Though a simple comparison of the aforementioned testimony reveals what appears to be two varied versions of the event, a more detailed analysis demonstrates their symbiotic relationship, especially in light of corroborating testimony. Kelsey has objectively proven that the supposed manner Lauzon contends the accident happened was not scientifically possible: the SN2 would not fire without the bottom contact point and trigger being depressed. Senco concurs in Kelsey's scientific conclusion. In spite of the contradiction between Kelsey and Lauzon's testimony, Kelsey does not discredit Lauzon's testimony. Instead, Kelsey explains how Lauzon's recollection of the event, specifically that the SN2 was four to five inches above the sheathing, further evidences the double-fire: since Lauzon did not intend to drive the nail, he experienced a double-fire due to an unexpected recoil operating against his hand. Thus, a more detailed examination illustrates that Kelsey's testimony is dependent upon Lauzon's recollection of the event. If Lauzon was aware that the bottom contact point was depressed, the recoil fire would not have occurred because the recoil would have been anticipated. As a result, the bottom triggering

mechanism would not have remained in contact with the sheathing and the tool could not have cycled again.

Kelsey's double-fire conclusion is consistent with other crucial aspects of Lauzon's testimony as well as the sole eye-witness, Nelson. Lauzon testified that two nails were expelled in rapid succession. It was the second nail that imbedded itself in Lauzon's hand. This comports with Kelsey's conclusion that there was a double-fire. Further credence is given to Kelsey's version of the event in light of the statement given by Nelson. Nelson states he clearly remembers the bottom contact point hitting the edge of the sheathing.⁸ We would agree that where opinion testimony has no support in the record that it should be excluded. See Weisgram, 169 F.3d at 518-20. However, in the present case the district court failed to recognize the connection between Nelson's statement as the sole eye-witness and the testimony of Kelsey. In conclusion, Nelson's recollections and portions of Lauzon's testimony clearly correspond with and support Kelsey's conclusions.

What is apparent from the foregoing analysis is that a sufficient nexus exists between the testimony of Lauzon and Nelson and that of Kelsey. Thus, Kelsey's proffered expert testimony will aid the jury in their determination. See Daubert, 509 U.S. at 591. It is far better where, in the mind of the district court, there exists a close case on relevancy of the expert testimony in light of the plaintiff's testimony to allow the expert opinion and if the court remains unconvinced, allow the jury to pass on the

⁸An examination of the nature of the incident could account for the difference between the testimony offered by Kelsey and Nelson and that of Lauzon. A jury could readily find that Lauzon's recollection may have been clouded by the suddenness of the accident.

evidence. Depending on the verdict,⁹ the trial court can always refer to Federal Rule of Civil Procedure 50(b) and grant a judgment as a matter of law or a new trial.

In conclusion, we find a sufficient relationship exists between the facts and the expert testimony proffered by Kelsey to aid the jury in resolving the factual dispute.

II. Conclusion

Through examination of the record in light of the requirements of Daubert and its progeny, ineluctably we are led to conclude the district court's exclusion of the testimony was an abuse of discretion and fell outside the spirit of admissibility as set forth in Federal Rule of Evidence 702. We reverse the district court's exclusion of Kelsey's proffered expert testimony and remand the case for further proceedings consistent with this opinion. We likewise reverse the district court's grant of summary judgment.

REVERSED and REMANDED.

A true copy.

Attest:

CLERK, U.S. COURT OF APPEALS, EIGHTH CIRCUIT.

⁹It is important to remember that any discrepancies that do exist affect credibility and not admissibility. Daubert, 509 U.S. at 591; See also Kannankeril, 128 F.3d at 807-8.